

WHAT IS CLAIMED IS:

1. Lighting or signalling device, in particular for a motor vehicle, which comprises:

- a light guide at least one portion of which is generated by the movement of a roughly circular vertical transverse elementary section along a director line, the contour of the elementary section comprising a front peripheral lighting portion and a rear peripheral portion which comprises a rear light-diffusion segment, the elementary section comprising a principal optical axis with a transverse direction which extends from rear to front from the diffusion segment as far as the front peripheral portion;

- and a light source emitting light rays which enter the light guide through at least one end face so as to be channelled by the light guide;

of the type in which the channelled light rays propagate in the light guide by successive total reflections in the general direction of the reflector line, and in which the channelled light rays reaching the rear diffusion segment are diffused, the rays diffused towards the rear emerging outside the length, and the rays diffused towards the inside of the guide included in a given solid angle around the principal optical axis being refracted through the front lighting portion of the length,

- at least one reflector which redirects forward the light rays which emerge from the elementary section through its rear peripheral portion; and

- a rear reflector which is situated opposite the rear diffusion segment along the principal optical axis and reflects towards the inside of the elementary section the rays diffused towards the rear so that they are refracted through the front peripheral portion.

2. Device according to claim 1, wherein, in a plane perpendicular to the director line, the rear reflector has a shape such that the rays emitted by the rear light-diffusing segment which it reflects are refracted by the elementary section so as to emerge from the front peripheral portion substantially parallel to the principal optical axis.

3. Device according to claim 1, wherein the rear reflector reflects the rays diffused towards the rear in a convergent fashion towards the rear diffusion segment.

4. Device according to claim 3, wherein the rear reflector has a vertical transverse elementary section in the form of an arc of a circle whose centre is arranged globally on the rear diffusion segment.

5. Device according to claim 3, wherein the rear reflector consists of a layer of reflective material which covers the external surface of the rear diffusion segment.

6. Device according to claim 2, wherein the rear reflector reflects the rays diffused towards the rear in a convergent fashion towards the rear diffusion segment, and wherein the front peripheral portion forms a convergent lens whose object focus is approximately arranged on the rear diffusion segment.

7. Device according to claim 1, wherein the rear peripheral

portion of the elementary section comprises a top lateral light-diffusion segment which defines a secondary optical axis extending in the elementary section of the light guide from the top lateral diffusion segment downwards, and which diffuses the channelled light rays downwards inside the length and upwards outside the length;

and wherein the optical system comprises a top lateral reflector which is situated above the elementary section opposite the top lateral diffusion segment along the secondary optical axis so as to reflect the rays diffused upwards by the top lateral segment roughly forwards.

8. Device according to claim 7, wherein the secondary optical axis is substantially vertical and perpendicular to the principal optical axis.

9. Device according to claim 7, wherein the top lateral reflector has a parabolic shape whose object focus is arranged on the top lateral diffusion segment so as to reflect forwards, in a direction substantially parallel to the principal optical axis, the rays diffused upwards.

10. Device according to claim 7, which comprises a bottom lateral reflector which is situated under the elementary section in line with the secondary optical axis and which reflects, forwards and parallel to the principal optical axis, the rays which are diffused downwards by the lateral diffusion segment and refracted by the rear peripheral portion.

11. Device according to claim 10, wherein the rear peripheral portion comprises a bottom part in the form of a lens whose image focus corresponds substantially to the top lateral

diffusion segment so that the rays diffused downwards emerge parallel to the secondary optical axis.

12. Device according to claim 1, wherein the rear peripheral portion of the elementary section comprises a first top lateral diffusion segment and a second bottom lateral diffusion segment which define a secondary optical axis extending from the first top lateral diffusion segment as far as the second bottom lateral diffusion segment in a roughly vertical fashion;

and wherein the external surfaces of the first and second lateral diffusion segments are covered with a reflective material so that the rays are diffused by the lateral diffusion segments in the general direction of the secondary optical axis towards the inside of the elementary section;

wherein the parts of the peripheral portion opposite to each of the lateral diffusion segments are in the form of lenses whose object focus corresponds substantially to the opposite lateral diffusion segment so that the light rays emerge from the light guide parallel to the secondary optical axis;

and wherein the device comprises two lateral reflectors which are situated respectively below and above the elementary section opposite the lateral segments and which reflect the said emerging light rays roughly towards the front.